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(54) METHOD FOR DRIVING PUMPING LIGHT SOURCE FOR OPTICAL AMPLIFICATION

(57) Abstract:

PURPOSE: To enhance the reliability of pumping light sources by providing plural pieces of the light sources for pumping light which input the pumping light together with signal light into an optical fiber and optically amplifying the light, detecting the deterioration in the pumping light sources during the operation and alternating the deteriorated pumping light source under operation with the pumping light source under standing by.

CONSTITUTION: Plural pieces of the light sources LD1 to LDn for pumping light are provided. The deteriorated pumping light source under operation, for example, LD1 is, changed over with the pumping light source under standing by, for example, LD2 by a changeover control circuit 18. This changeover is executed by detecting the deterioration in the pumping light source under operation or by the changeover signal from the outside. The standing by sides are successively changed over to the currently working amplifiers if the currently working amplifiers are deteriorated. The reliability of the pumping light sources for optical amplification is enhanced in this way and the reliability of the optical amplifying repeater 20 is enhanced.

